

Air Quality, San Antonio and the Clean Air Plan



Arizona Department of Environmental Quality
October 11, 2002

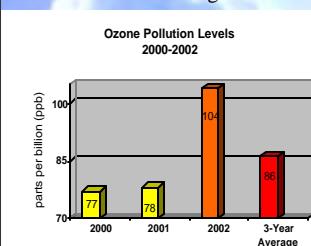
Clean Air Actions: San Antonio

- 1995: 1st Air Quality Committee chaired by Senator Jeff Wentworth. First EI for year 1994.
- 1997: 8-hour average ozone National Ambient Air Quality Standards (NAAQS) promulgated
- 1999: 1st official AIR Committee meeting
- 2001: *Whitman v. American Trucking Assns., Inc.* US Supreme Court found in favor of EPA re: 8-hour ozone standard. Remanded to lower court / EPA to rewrite 8-hour implementation policy.
- 2004: First non-attainment designations likely



Our Current Ozone Status

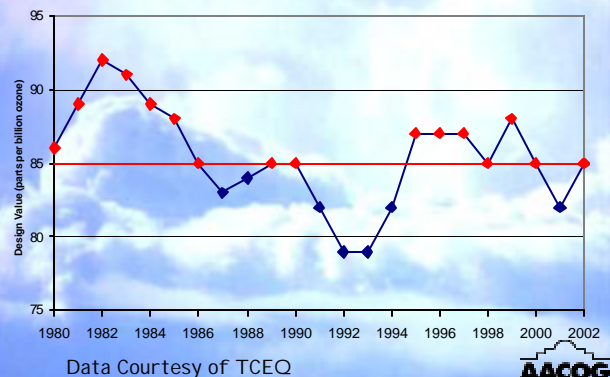
- Standard:
 - Take 4th-highest eight-hour averaged reading at each monitor
 - Calculate average of 4th-highest 8-hr. av. over three years
 - Must average below 85 parts per billion.
- The 2000-2002 average violates the EPA's ozone standards.



- This violation enables the EPA to declare the San Antonio Metropolitan Statistical Area in "non-attainment."



Ozone 8 Hr. Design Value Trend
San Antonio Area



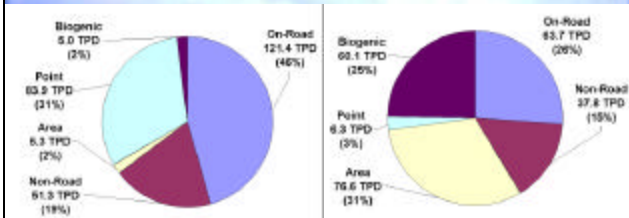
Data Courtesy of TCEQ



Sources of NOx and VOC

1999 NOx Emissions

1999 VOC Emissions



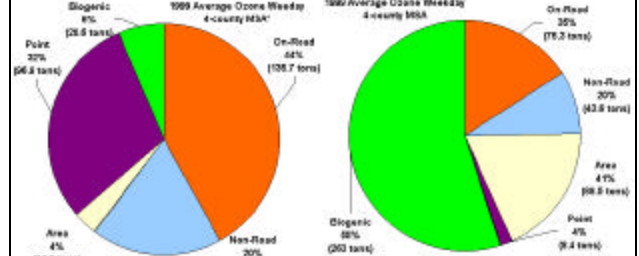
Estimates for Bexar County,
Average Ozone Weekday



Sources of NOx and VOC

1999 NOx Emissions

1999 VOC Emissions



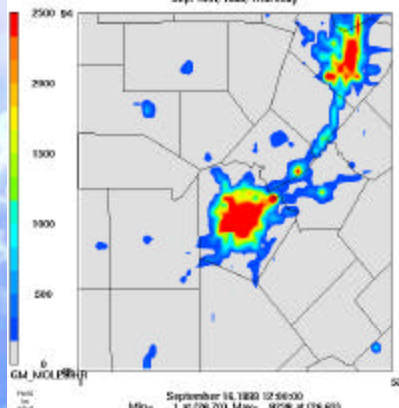
Estimates for Metropolitan Statistical Area,
Average Ozone Weekday



Total NOx Emissions

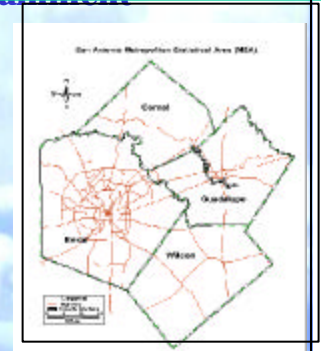
Anthropogenic Sources
Sep. 16th, 1999, Thursday

DRAFT



Non-Attainment

- Non-Attainment
 - EPA is likely to declare the area in Non-Attainment by 2004
 - Incurs a number of penalties for the local economy
 - Mandates the implementation of various “control strategies” to reduce ozone pollution



Non-Attainment

- **EPA-Mandated Emissions Control Strategies**

EPA may require standardized emission controls rather than voluntary or locally-tailored emission controls

- **Transportation Conformity**

Loss or delay of federal funding for transportation projects. Some types of projects (including new roads and adding lanes) cannot be built until conformity modeling proves they will not degrade the region's air quality.

- **New Source Review**

Any business wishing to establish itself in this area or any business already established that wishes to expand its operation must prove that its emissions will not worsen the ozone pollution problem.



Alternative: Clean Air Plan

- **Clean Air Plan**

- Allows the area to avoid non-attainment designation.
- Must be signed by local elected bodies by December 31, 2002
- Signing commits the area to further study of the problem and development of timelines for implementation of solutions



Alternative: Clean Air Plan

The Clean Air Plan is an agreement between local governments within the Metropolitan Statistical Area, EPA and TNRCC. Subsequent to signing the plan, local governments must agree before control strategies can be implemented.

- **Timeline of Commitments**

- Emissions Inventory & Modeling to Develop Action Plan for Inclusion in State Implementation Plan: 12/31/2004
- Control Strategies Implemented: 12/31/2005
- Maintenance Plan for Growth (projected through 2012)
- Continuing Public Involvement
- Attainment of Ozone Air Quality Standards: 12/31/2007



Control Strategies will only be developed after the Clean Air Plan is signed, and only following approval for specific strategies by local elected officials and citizens.

Candidate Control Strategies include:

- Inspection/Maintenance Program (Emissions Testing)
- Expansion of Air Quality Health Alert Notification Program
- Voluntary Emissions Reductions
- Increased Enforcement of Speed Laws
- Area Source Measures: Tree Planting and Preservation
- Alternate Fuel/Electrical Ground Support Equipment



Summary of Strategies Comparison

- The 8-hour average ozone National Ambient Air Quality Standard is federal law, as upheld by the Supreme Court.
- This area has violated air quality standards due to excess ozone pollution.
- We expect that, unless we act, the EPA will designate us non-attainment.
- The Clean Air Plan will defer a non-attainment designation, avoiding those consequences while still cleaning up our air.



What I've Learned

- Plan Early – Monitor in outlying areas
- Education is Always Paramount
- The EAC is of great benefit to state and federal governments
 - Local folks take the heat... but this isn't bad
- The EAC is of great benefit to the entire proactive planning process
 - By promoting the EAC which contains no control strategies, the bitter pill is a little sweeter



Air Monitors In Our Region



Courtesy of the Texas Commission on Environmental Quality

4 Highest 8-Hour Ozone Levels, San Antonio region, as of October 9, 2002

Monitoring Site	Highest		Second Highest		Third Highest		Fourth Highest	
	Date	Value	Date	Value	Date	Value	Date	Value
San Antonio Northwest C23	9/12/02	111	6/24/02	110	6/17/02	107	6/18/02	104
Camp Bullis C58	6/24/02	100	9/13/02	97	6/23/02	96	6/18/02	95
CPS Pecan Valley C678	9/13/02	84	9/12/02	83	6/24/02	81	6/23/02	80
Calaveras Lake C59	9/13/02	90	9/12/02	86	6/18/02	82	6/17/02	81

Data reporting courtesy of TCEQ



Four monitors established

- Elm Creek Elementary School, C501
 - City of Atascosa, Bexar County
 - Real-time monitoring since June 17, '02
- City of Fair Oaks Ranch, C502
 - Bexar County
 - Real-time monitoring since June 28, '02
- Bulverde Elementary School, C503
 - City of Bulverde, Comal County
 - Real-time monitoring since August 26, '02
- National Weather Service Station, C504
 - City of New Braunfels, Guadalupe County
 - Real-time monitoring since August 30, '02



4 Highest Eight-Hour Ozone Concentrations at AACOG-sponsored monitors as of October 9, 2002

Monitoring Site	Highest		Second		Third Highest		Fourth Highest	
	Date	Value	Date	Value	Date	Value	Date	Value
Elm Creek Elementary C501	9/12/02	98	8/30/02	86	8/31/02	85	9/13/02	81
Fair Oaks Ranch C502	9/14/02	87	9/13/02	85	9/28/02	83	9/21/02	82
Bulverde Elementary C503	9/13/02	94	9/14/02	92	9/21/02	86	9/27/02	82
New Braunfels Airport C504	9/13/02	104	9/14/02	90	9/12/02	90	8/31/02	78

Data reporting courtesy of TCEQ

